



STATUS OF FORESTS AND TREE MANAGEMENT IN MALAWI

**A Position Paper Prepared for the
Coordination Union for Rehabilitation of
the Environment (CURE)**



Daulos D.C. Mauambeta (WESM)
David Chitedze (Greenline Movement)
Reginald Mumba (CURE)
Stella Gama (Department of Forestry)
August 2010

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
ABBREVIATIONS	vi
ACKNOWLEDGEMENTS	vii
EXECUTIVE SUMMARY	viii
1.0 HISTORY OF FOREST CONSERVATION IN MALAWI.....	- 1 -
1.1 1920-1964: Before Independence.....	- 1 -
1.2 1964-1985: Early post independence.....	- 1 -
1.3 1986-1994: Authoritarian and pre-democratic state.....	- 2 -
1.4 1995-2010: Multi-party democracy	- 2 -
2.0 TRENDS IN FOREST COVER	- 5 -
2.1 National Forest Cover.....	- 5 -
2.2 Forest cover by District	- 6 -
2.3 Public Forests in Malawi.....	- 7 -
2.3.1 Forest Plantation Agreements	- 9 -
2.4. Factors leading to forest cover loss.....	- 10 -
2.4.1 High population growth.....	- 10 -
2.4.2 Tobacco growing.....	- 11 -
2.4.3 Agricultural expansion	- 14 -
2.4.4 Biomass Energy and Non-Energy Demands.....	- 16 -
2.4.5 Brick burning.....	- 17 -
2.4.5 Urbanization	- 18 -
2.4.6. Inadequate budgetary support from Government.....	- 19 -
3.0 THE POLICY AND LEGAL FRAMEWORK, STRATEGIES AND ACTIONS.....	- 21 -
3.1 Policy and legal framework.....	- 21 -
3.1.1 The Malawi Constitution.....	- 21 -
3.1.2 Vision 2020 and Malawi Growth Development Strategy	- 21 -
3.1.3 The Malawi Forestry Policy and Legislation.....	- 22 -

3.1.4 The National Forestry Programme (NFP).....	- 22 -
3.1.5 Standards and Guidelines for Participatory Forestry	- 23 -
3.2 Forest and Tree Management in Malawi	- 23 -
3.2.1 Wood Energy Plantations	- 23 -
3.2.2 Blantyre City Fuel wood Plantations	- 23 -
3.2.3 Improved Forest Management for Sustainable Livelihoods Programme	- 25 -
3.2.4 Forestry Replanting and Tree Nursery Project (FOREP)	- 27 -
3.2.5 Tree Planting and Management for Carbon Sequestration and Other Ecosystems Services	- 27 -
3.2.6 The Income Generating Public Works Programme (IGPWP)	- 27 -
3.2.7 Sustainable Management of Indigenous Forests (SMIF) Project.....	- 27 -
3.2.9 Bwanje Rural Environmental and Development Organization (BERDO)	- 29 -
3.2.10 Sendwe Village Forest Area, T.A Khongoni, Lilongwe.....	- 29 -
3.2.11 Rivirivi River Catchment Management Project.....	- 30 -
3.2.12 Chingoli Village Forest Area (Bisa Hill), T.A. Nkula, Machinga	- 30 -
3.2.13 Howe Village Forest Area, T.A. Mlumbe, Zomba	- 31 -
3.2.14 Graveyards	- 31 -
4.0 ANALYSIS OF ISSUES.....	- 33 -
4.1 Land tenure and ownership of trees and forests	- 33 -
4.2. Policy and Implementation Failure	- 33 -
4.2.1 Influence of politics (single to multiparty to democracy).....	- 34 -
4.2.2 Laisser-faire approach to forest management	- 34 -
4.2.3 Professional concubinage	- 34 -
4.2.4 Corruption.....	- 35 -
4.2.5 Poor Governance	- 35 -
4.2.6 In-efficient administration, weak leadership and poor governance	- 36 -
4.2.6 Funding and its prioritization.....	- 36 -
4.4 Globalization and Structural Adjustment Programmes (SAPS)	- 37 -
4.5 Forest data collection, analysis and dissemination	- 37 -
5.0 RECOMMENDATIONS	- 38 -

5.1 Effective Policy Implementation	38 -
5.2 Recovering land forest cover	38 -
5.3 Survival rates of planted trees	38 -
5.4 Alternative energy sources	38 -
5.5 Forest on tobacco estates	39 -
5.6 Regulate the use of burnt red bricks	40 -
5.7 Promotion of Individual Ownership of tree planting and management	40 -
5.8 Reduce Population Increase.....	41 -
5.9 Promote conservation of graveyards, <i>Manda</i>	41 -
6.0 ADVOCACY ISSUES FOR CURE AND ITS PARTNERS.....	42 -
7.0 REFERENCES.....	43 -

Tables of Tables

Table 1: Forest Cover (%) by District in 1993	6 -
Table 2: Malawi's Forest Reserves and Plantations.....	8 -
Table 3: Population distribution and density (1987, 1998 and 2008).....	11 -
Table 4: Number of registered tobacco smallholder clubs 2000 to 2009/10.....	13 -
Table 5: Number or registered tobacco estates.....	14 -
Table 6: Land use types for Malawi (1991-2008)	15 -
Table 7: Total national energy demand in Malawi, by sector and fuel	16 -
Table 8 : Recurrent budget and estimated SLM Epxneidture of the Department of Forestry ('000 MK).....	20 -

Table of Figures

Figure 1: Land cover loss between 1972 and 1990 in Km²..... - 5 -

Figure 2: Malawi Landcover Changes 1979 to 1999) - 6 -

Figure 3: Population Increase in Malawi (1907 to 2008) in Millions - 10 -

Figure 4: Non Household use of firewood in Malawi (January 2009) - 12 -

Figure 5: Recurrent Budgets and Estimated SLM Expenditure of the Department of Forest (MK) - 19 -

Figure 6: Improved Forestry for Sustainable Programme (IFMSLP) Sites - 25 -

ABBREVIATIONS

ACB	Anti-Corruption Bureau
AIDs	Acquired Immunodeficiency Syndrome
ARET	Agricultural Research and Extension Trust
BERDO	Bwanje Environmental and Rural Development Organization
BEST	Biomass Energy Strategy
CBD	Convention on Biological Diversity
CSOs	Civil Society Organizations
CURE	Coordination Union for the Rehabilitation of the Environment
DoF	Department of Forestry
DWT	Dark Western Tobacco
ESCOM	Electricity Supply Commission of Malawi
FAO	Food and Agriculture Organization
FCT	Flue Cured Tobacco
FD	Forest Department
FOREP	Forestry Replanting and Tree Nursery Project
FOSA	Forestry Outlook Studies in Africa
GDP	Gross Domestic Product
GLM	Greenline Movement
GoM	Government of Malawi
HIV	Human Immunodeficiency Virus
IFMSLP	Improved Forest Management for Sustainable Livelihoods Programme
IGPWP	Income Generating Public Works Programme
MEET	Malawi Environment Endowment Trust
MGDS	Malawi Growth and Development Strategy
NDDF	Northern Division Dark Fired
NFP	National Forestry Programme
NSO	National Statistical Office
ORT	Other Recurrent Transactions
PHC	Population and Housing Census
SAPS	Structural Adjustment Programmes
SMIF	Sustainable Management of Indigenous Forest
TA	Tribal Authority
TCC	Tobacco Control Commission
TPMCSOES	Tree Planting and Management for Carbon Sequestration and Other Ecosystems Services
VFA	Village Forest Area
VNRMC	Village Natural Resources Management Committee
WESM	Wildlife and Environmental Society of Malawi

ACKNOWLEDGEMENTS

The Team would like to thank the Coordination Union for the Rehabilitation of the Environment (CURE) for the financial support provided to enable this work done. We would like also to thank each and every individual that was in one way or another was either consulted or provided data for this paper.

At WESM, we would like to thank the Accountant, Miss Nellie Yalaukani for facilitating all the logistics during meetings and field visits.

Finally, we would like to thank all those that gave feedback to this paper.

Yours sincerely, the Team

Daulos D.C. Mauambeta,	Wildlife and Environmental Society of Malawi)
David Chitedze,	Greenline Movement
Reginald Mumba,	Coordination Union for the Rehabilitation of the Environment (CURE)
Stella Gama,	Department of Forestry

Cover photo: Chongoni Forest Plantation- illegal timber harvesting by neighbouring communities. Daulos Mauambeta, 2010

Funding support:

This document has been produced with the financial assistance of the European Union through the Capacity Building Program for NSAs in Malawi. The contents of this document are the sole responsibility of CURE and its partners and those of the authors and can under no circumstances be regarded as reflecting the position of the European Union.

EXECUTIVE SUMMARY

The position paper has consolidated a number of reports and studies that have been done over the years supplemented by empirical evidence through photography to highlight the current status of Malawi's trees and forests.

The paper looks at the history of forest conservation in Malawi from the period before independence, early post independence during the time of Kamuzu Banda era, and the multi-party democracy period. All these periods have their own milestones and challenges in forest conservation and management in Malawi.

The paper has also looked at forest cover trends in Malawi. In general, Malawi has lost her forest cover by over 40% between 1972 and 1990. This figure should be much less now. More forest cover has been lost in communal areas compared to public protected areas. There are many factors that have led to forest cover loss amongst which are high population growth, opening of forests for settlements and agriculture; tobacco growing, biomass energy, brick burning, urbanization and inadequate budgetary support from government.

The paper has tried to look at the policy and legal framework to justify and underscore the fact that Malawi has the necessary policy and legal instruments in place for effective forest and tree management. A number of supporting instruments such as programmes and strategies also exist. It is also found that a number of interventions have taken place by government, local communities and the private sector to address the issue of forest and tree management in Malawi. To this end, a review of some public and community forest programmes has been made.

Despite the existence of a robust policy and legal framework, existence of strategies, programmes and guidelines and many interventions done by both government, private sector and civil society, a number of issues have been identified which are impinging on sustainable forest and tree management in Malawi. Some of these issues include but are not limited to the following:- land tenure and ownership of trees and forests, policy and implementation failure, influence of politics; *laissez-faire* approach to forest management, professional concubinage, corruption, poor governance at local level, in-efficient administration and weak leadership; inadequate funding and its prioritization and globalization and Structural Adjustment Programmes (SAPS).

The paper concludes with some recommendations on the way forward and possible advocacy issues and actions for CURE and its partners to engage Government of Malawi and the people of Malawi if our forests and trees are to be sustainably managed.

I.0 HISTORY OF FOREST CONSERVATION IN MALAWI

The political processes operating in a country have a large bearing on the development agenda, including forest conservation and development. Hence, in this issue paper, the history of forest conservation in Malawi will be aligned to the important political periods.

I.1 1920-1964: Before Independence

- During this period, state forest reserves were constituted free from rights of users and any native interests. In addition, communal forest scheme was launched by creating Village Forest Areas (VFAs), which were set aside by the Tribal Authority (TA), with technical support from the Forest Department (FD). A total of 69,000 hectares of VFAs were set aside by 1940, under the control of local headmen and for the purpose of local use.
- During the same period, first native foresters were appointed. Forest Guards were posted at each TA to license and control extraction of *Khaya anthotheca* (Mbawa) and *Pterocarpus angolensis* (Mlombwa), which occurred within and outside of the VFAs. The proportion of revenue share was 75% going to the local council and 25% to the central government. “Colonial fund” paid salaries and expensed for local TA councils. The arrangement provided a very important source of revenue to the councils for local development. At the same time, first attempts were made to encourage reforestation of denuded lands but results were unsatisfactory because of unsuitability of the planting sites for the (exotic) species.

I.2 1964-1985: Early post independence

- During this period, the Department Forestry shifted its attention to establishing industrial plantations for national timber self-sufficiency, in line with international trends at the time.
- Forest Guards were withdrawn from Tribal Authority (TA) areas, and placed in the forest reserves. Colonial fund discontinued, and as a result, TAs were weakened and they could no longer protect and manage their VFAs. Revenue from timber sales for local development also dwindled.

- Another development that occurred was that forestry extension became the responsibility of Agricultural Extension workers, who had little knowledge about forestry, and hence, had little interest in advising local people on management of VFAs.
- Due to post independence euphoria, people moved into and cleared large areas of VFAs in spirit of reclaiming the land. As a result, VFAs declined from over 5,000 in 1964 to 1,200 in 1985. However, on a positive note, the National Tree Planting Programme was initiated, which focused on promoting the fast growing exotic species (free seedlings), and incentives (tree planting bonuses) were used to encourage tree planting in rural areas.

1.3 1986-1994: Authoritarian and pre-democratic state

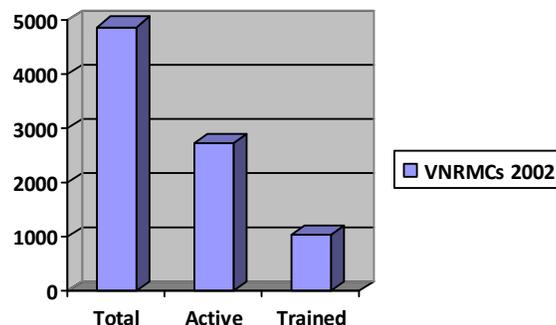
This period was characterized by the following events/issues:

- Forestry Department took over responsibility of protection, control and management of customary lands from local councils.
- Forestry Department was under pressure to generate more revenue for the state under the Appropriation-in aid financing arrangement. The Customary Land Division (within Forestry Department) was set up to oversee extraction of royalties for timber and firewood harvesting from customary land. As a result, large scale of extraction of timber and firewood took place, including from VFAs, individual's fields and gardens and along riverbanks.
- Revenue share was reversed; 75% going to the central government and 25% to local councils, but even then, the 25% was not paid to councils. The bizarre aspect of this arrangement was that no compensation was paid to local people for removing trees from their own fields or VFAs.
- Widespread corruption was reported, involving Forestry staff, and they became unpopular, as they were seen as being responsible for denuding the woodlands from customary lands.

1.4 1995-2010: Multi-party democracy

The following major issues have occurred:

- The first five years were characterized by multiparty democracy euphoria, resulting in destruction of timber plantations and escalation of deforestation through charcoal production on both private and customary land, e.g., Ndirande Timber Plantation in Blantyre disappeared within two years after attaining the multiparty system of government (in 1994).
- Due the restructuring process in the public service, massive layoffs of general workers occurred, particularly in the forest plantations, and this resulted in an inadequate management that resulted in increased fire incidences among other things
- Tree planting subsidies and bonuses were phased out, and seedling production was handed over to local communities, but FD continues to provide seed and other inputs, though on a limited scale due limitation of funds.
- Recognition of the need to return ownership of trees and forests to local communities.
- Efforts to revive the VFA system through setting up of Village Natural Resource Management Committees (VNRMCs), and providing them with silvicultural training. By 2002, 4,878 VNRMCs had been formed, but only 2,732 (56%) were reported active while 1,025 (21%) had been trained (DoF Annual Report, 2002).



- New/revised National Forest Policy (1996) and Forest Act (1997) gives local people full ownership of trees grown and managed by them on customary land. Local people authorized to extract wood and non-wood products without a license for subsistence use. However, FD continues to control the timber and firewood trade through system of loyalties and claims 20% of the revenue.

- Forestry Department engaged in efforts to re-orientate staff to play a supportive and facilitator role. However, licensing and law enforcement to control harvesting and transport of forest produce remains forestry staff duties.
- Plethora of Donor funded projects of over 40 community forestry projects in 1996. Many of them focused on the improved management of indigenous woodlands.
- During the 1995-2004 period, District Forest Offices and forest stations suffered severe funding. For example, in 1995 a District Forestry Office could get a monthly funding of MK10,000.00 (which is now MK37,000.00)
- The country starts adopting co-management approach to forestry management

2.0 TRENDS IN FOREST COVER

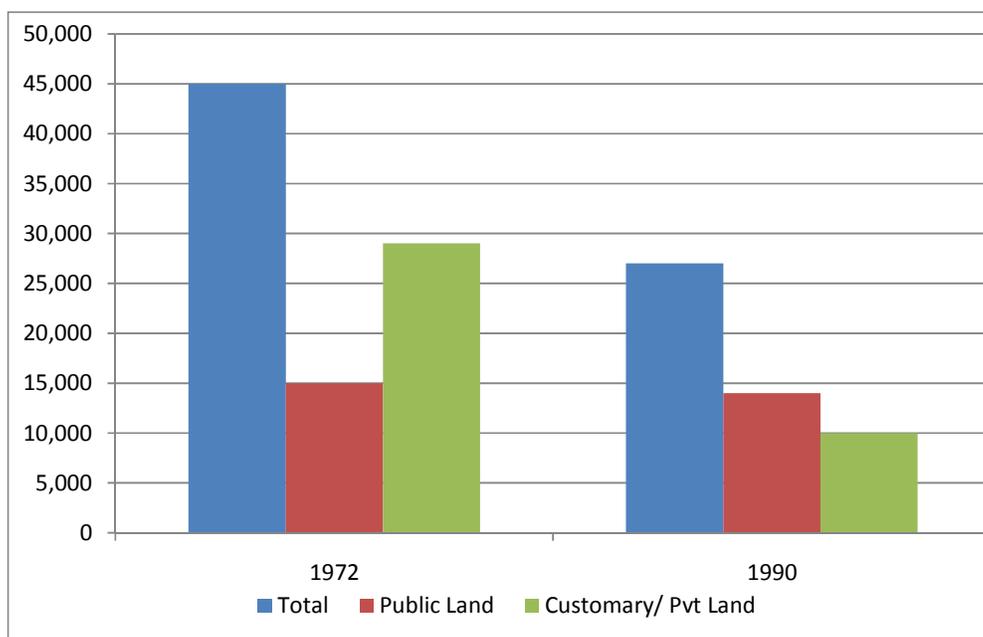
2.1 National Forest Cover

In 1975, 47% of the territory in Malawi was classified as forest. But today, out of the total land area of 94,270,000 ha of Malawi, 3,336,000 ha, which represents 36 %, is classified as forest (FAOSTAT 2010). Of this area, 15 % is under natural woodlands on customary lands, 11 % under national parks and game reserves and 10 % under forest reserves and protected hill slopes. This is the highest deforestation rate in the SADC region, representing a net loss of some 30,000 to 40,000 hectares per year of (mostly miombo) woodland in Malawi.

During the last decade, the rate of deforestation, (percentage of forest cover lost per year) ranged from 1% to about 3% overall, averaging 2.3% in recent years (1998). For example, Malawi lost 2,501,571 ha. of both Indigenous and plantation forests between 1972-1992; much higher values after this period. Between 1972 and 1990, overall forest cover declined by 41% at the rate of 2.3% per annum; forest cover declined by 5% on public land mainly in protected areas at the rate of 0.03% per annum and 61% on customary and private land at the rate of 3.4% per annum from increased demands for farmland and wood (Bunderson & Hayes).

Much of the current deforestation pressure occurs in indigenous forests and woodland and on customary land.

Figure 1: Land cover loss between 1972 and 1990 in Km²



2.2 Forest cover by District

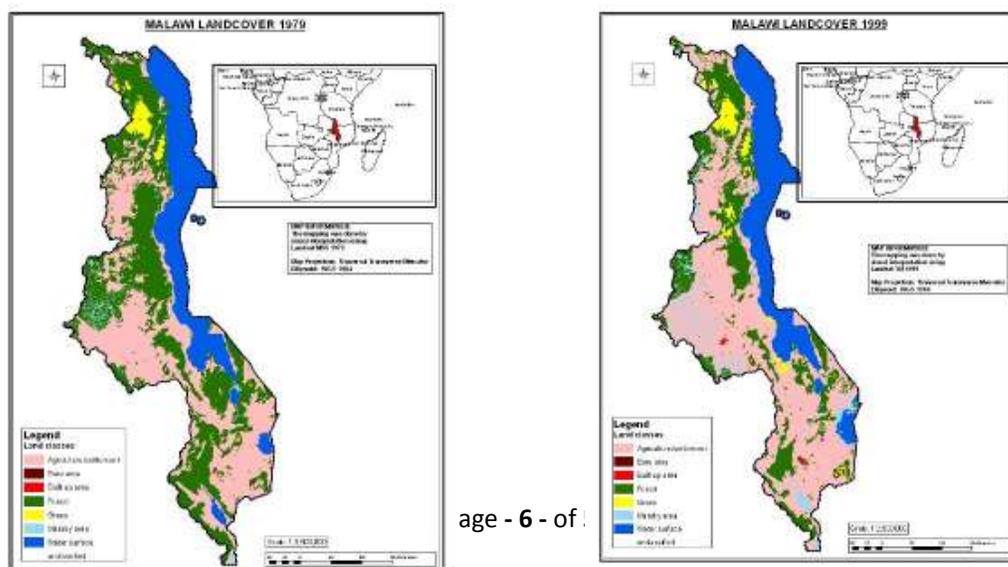
Table 1 shows that between 1992 and 1993, there was a lot of variation in terms of forest cover from District to District. Some Districts had a forest cover below 5% (Thyolo, Chiradzulu and Dowa) while others had large forest cover percentage of over 50% (Karonga, Nkhatabay and Nkhotakota). This scenario could be different today.

Table 1: Forest Cover (%) by District in 1993

District	Forest area%	District	Forest area%	District	Forest area%
Chitipa	38	Mchinji	9	Zomba	7
Karonga	69	Lilongwe	16	Mwanza	31
Rumphi	44	Dowa	4	Blantyre	30
Nkhatabay	58	Salima	7	Chiradzulu	4
Mzimba	25	Dedza	22	Mulanje	12
Kasungu	28	Ntcheu	10	Chikwawa	33
Nkhotakota	52	Mangochi	38	Thyolo	2
Ntchisi	13	Machinga	16	Nsanje	34

Source: Malawi Land Cover Map by Swedish Satellitbild and Forestry Department (1993) under the Wood Energy Component of the World Bank Malawi Energy I Project

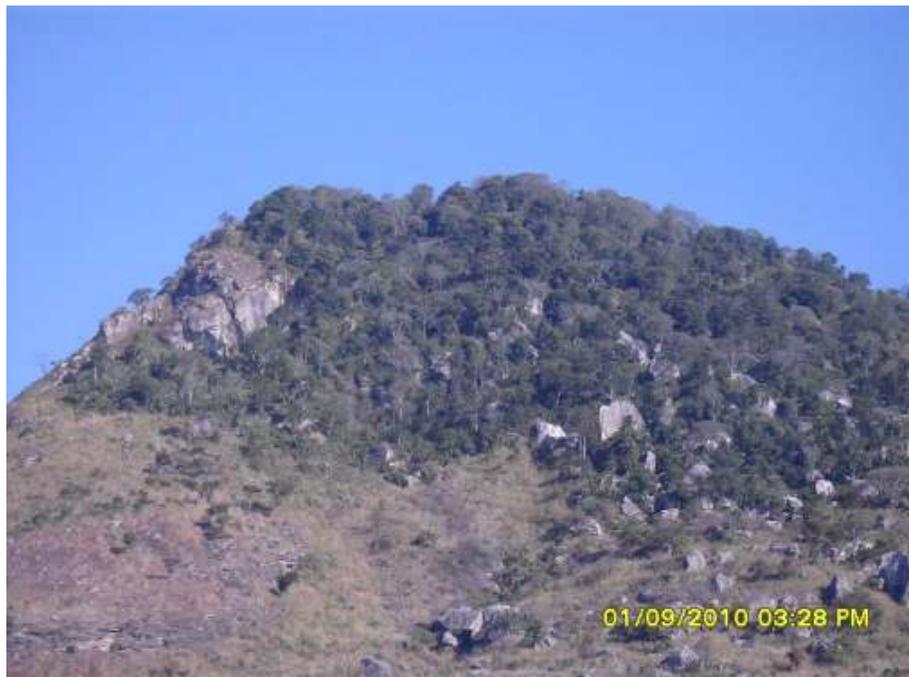
Figure 2: Malawi Landcover Changes 1979 to 1999)



2.3 Public Forests in Malawi

These forest reserves were gazetted for watershed and catchment conservation, provision and regulation of environmental services like soil conservation and biodiversity conservation, aesthetic and cultural values and for production purposes. More than 300 ha in Malosa Forest reserve in Zomba has been turned to arable land with very good knowledge of all stakeholders. However the area for the forest reserves presented in Table 2 represents the gazzeted area. There are various issues and human activities that are threatening the original status of the forest reserves and plantations. Encroachment for cultivation and settlements is one of the major problems in forest reserves. Kainja (2000) has reported that 23,012 hectares representing 2.6% out of 870,052 ha of forest reserves were encroached at 571 locations across Malawi.

Ndirande Forest Reserve was encroached for settlements and cultivation. Government has since reclaimed 300ha and the encroachers have been compensated approximately MK16 million. The remaining encroached 400 ha will cost government MK36 million for houses and gardens the encroachers had established. The integrity of these protected areas is also under threat from illegal production of charcoal to supply urban centres with low cost fuel. Most of the charcoal is produced from forest reserves with 15,000 ha cleared for an estimated volume of 6.08 million standard bags per year consumed in the Malawi's four cities (Kambewa et al 2007, Charcoal the Reality).



The remains of Maravi Forest Reserve, Blantyre. D Mauambeta 2010

Table 2: Malawi's Forest Reserves and Plantations

Protected area	Area in ha	Year gazetted	Protected area	Area in ha	Year gazetted
Northern Region					
Bunganya			Uzumara	754	1948
Chisasira	3447	1973	Vinthukutu	1957	1948
Kalwe	159	1956	Mahowe	59.168km	2002
Kaning'ina	14007	1935	Kamphoyo	635	
Lunyangwa	374	1935	Jembya	13764	1981
Mafinga Hills	4734	1976	Chikhang'ombe	5921	2002
Litchenya	316	1948	South Karonga Escarpment	13050	2002
Matipa	1055	1948	North Karonga Escarpment	7907	2002
Mtangatanga	8099	1935	South viphya	157728	1958
Mughese	771	1948	Ruvuo	4792.9	1935
Musisi	7034	1948	Kuwirwe	661.5	1935
Mkuwazi	1608	1927	Kawiya	643.9	
Perekezi	14482	1935	Wilindi	937	1948
Central Region					
Bunda	426	1948	Kongwe	1948	1926
Chimaliro	15205	1926	Mchinji	20885	1924
Chilobwe	1314	1960	Msitowalengwe	98	1974
Chongoni	12353	1924	Mua-Livulezi	12673	1924
Dedza Mt.	2917	1926	Mua-Tsanya	933	1924
Dedza-Salima Escarpment	30965	1974	Mvai	4140	1924
Dowa Hills	3142	1974	Ngala	2272	1958
Dzalanyama	98827	1922	North Senga	1207	1958
Dzenza	779	1948	Ntchisi	8758	1924
Dzonzi	4494	1924	South Senga	532	1958
			Thuma	15767	1956
Southern Region					
Amalika	370	1959	Michiru	3004	1970
Chigumula	525	1925	Milare	59	1949
Chiladzulu	774	1924	Mudi	39	1922
Kalulu Hills	2892	1958	Mulanje-Michesi	56314	1927
Liwonde	27407	1924	Namizimu	88966	1924
Malabvi	300	1927	Ndirande	1433	1922
Mangochi	40853	1924	Soche	388	1922
Mangochi Palm	501	1980	Thambani	4680	1927
Masambanjati	93	1974	Thuchila	1843	1925
Masenjere	276	1930	Thyolo Mt	1347	1924

Matandwe	31053	1931			
Tsamba			Thyolomwani	965	1930
Zomba-Malosa	19018	1913			

2.3.1 Forest Plantation Agreements

The Forest Policy and legal framework provides for establishment of plantations by non state actors as per Section 36 of the Forestry Act which states that:

The Minister may authorize the Director of Forestry to enter into a forest plantation agreement with any non-governmental organization or community who may wish to plant trees in forest reserves, public land, customary land and such agreement shall-

- a) *Provide for the obligation to grow and manage tree species as specified in the agreement and in accordance with plantations management which shall be approved by the Director of Forestry*
- b) *Convey the right to harvest the forest plantation in accordance with the terms of agreement*
- c) *Provide for advice and assistance from the Department of Forestry in growing and managing the plantations: and*
- d) *Specify obligations of each parties to the agreement*

Examples of such agreements are

1. RAIPLY Logging Concession agreement: the company was allocated about 20,000ha in the Viphya Plantation to log and replant. The company pays US\$5 per cubic metre reflecting RAIPLY responsibility for forestry operations. They have a management plan and they replant, protect and manage areas that have been harvested. Such that the silvicultural operations from the nursery through to planting weeding, thinning and pruning have been well done and better than the government controlled areas. RAIPLY has been attracted by the resource base, low wood cost, low entry price and concession offers them wood security. However currently RAIPLY has a low felling rate and production rate and 20,000ha is on the higher side
2. STECO and Chitakale Tea Estates Plantation Management Agreements (2008): in these 15 year agreements, the two companies have each been allocated 200ha to plant, manage and harvest eucalyptus species for firewood in Amalika Forest Reserve, Thyolo. The companies only have rights to the trees they have planted.

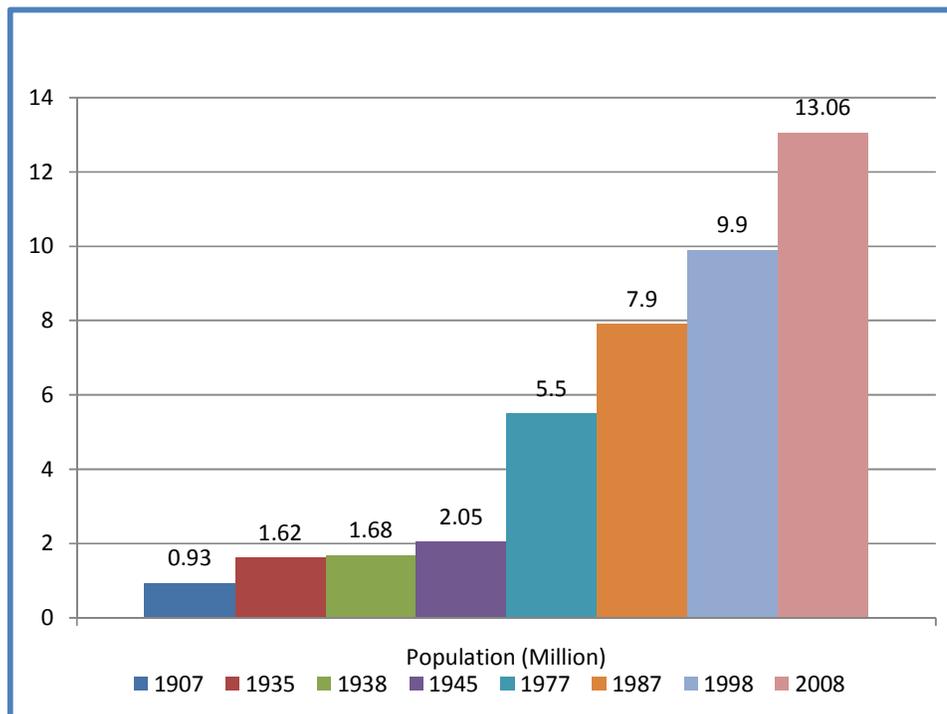
2.4. Factors leading to forest cover loss

Malawi’s forest cover has declined due to a number of causes, most of them anthropogenic and some natural. Deforestation arises from population growth, poverty, infrastructure development and economic activities, tobacco curing (Chipompha, 1997; Kayinja, 2000). In this section, we look at some of the major causes of deforestation in Malawi.

2.4.1 High population growth

Malawi has seen a high population growth since 1900. Malawi’s population was 0.93 million in 1907, 2.05 million in 1945, and 5.5 million in 1977 (Makumbi). . For a very long time there had been people moving into Malawi from the then Portuguese East Africa, now Mozambique. This was made worse by the 16 years of gorilla war that ended up with many refugees coming to Malawi. Some of these found relatives and never went back. The 2008 Population and Housing Census (PHC) indicated that the total population of Malawi was 13.06 million in 2008, an increase of 32% from that of 1998. This increase represents a 2.8% growth rate during the period. Similarly, the population density grew from 85 people per sq. km in 1978 to 105 people per sq. km in 1998 and then increased further to 159 people per sq. km in 2008 (NSO, 2008) (See Fig 3.0). High population increase exerts pressure on natural resources such as cultivation land and fuelwood.

Figure 3: Population Increase in Malawi (1907 to 2008) in Millions



While the country's three regions are of approximately equal size, the Northern Region has a significantly lower population. Population density hence increases from north to south, with Southern Region having over three times as many people per unit of area as Northern Region (See Table 3). Tree cover, environmental degradation and wood energy shortages all have a tendency to increase from north to south, largely as a result of the population density trend.

Table 3: Population distribution and density (1987, 1998 and 2008)

Region	Land Area (Km ²)	Population Census			Population Distribution			Population Density (per Km ²)		
		2008	1998	1987	2008	1998	1987	2008	1998	1987
Malawi Total	94276	13066320	9933868	7988507	100	100	100	139	105	85
Northern	26931	1698502	1233560	911787	13.0	12.4	11.4	63	46	34
Central	35592	5491034	4066340	3110986	42.0	40.9	38.9	154	114	87
Southern	31753	5876784	4633968	3965734	45.0	46.6	49.6	185	146	125

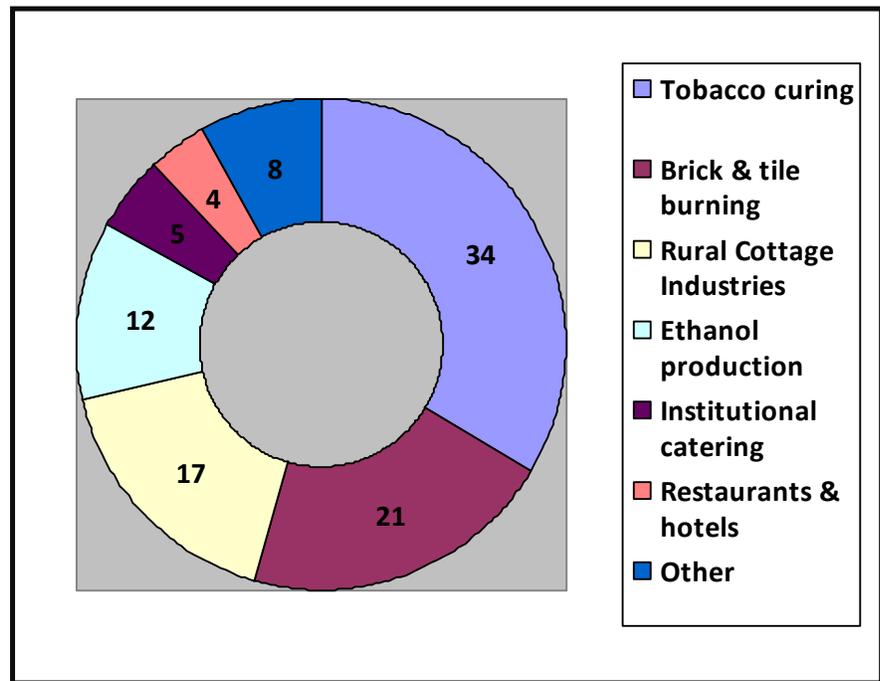
Source: National Statistical Office of Malawi (NSO), 2008

2.4.2 Tobacco growing

Tobacco is an important cash crop in Malawi as it contributes 35 % to the Gross Domestic Product (GDP) and 90% of the export earnings. However, tobacco growing has contributed to deforestation, particularly in the Central Region and some parts of Rumphi and Mzimba in Northern Region. Agriculture including tobacco growing has been blamed as the main contributing factor for biodiversity loss. Opening of agriculture requires clearing of forests. Tobacco growing presses even other demands on forests— timber for barn construction, poles and twigs for hanging and drying the tobacco; and firewood for tobacco curing (Mauambeta, July 2010).

Kafumba (1984) reveals that unprecedented expansion of tobacco curing operations, spurred by favourable world market conditions triggered wood demand, such that in 1980, 40% of wood consumed in Malawi was for tobacco curing. Currently, tobacco curing uses about 1% of the total biomass energy consumed in Malawi, which is 163,340 m³. Current studies have shown that tobacco curing is the major non-household user of firewood (GoM, BEST 2009).

Figure 4: Non Household use of firewood in Malawi (January 2009)



Source: GoM BEST, 2009

Studies conducted by the Agriculture Research and Extension Service Trust (ARET) point out that flue cured tobacco (FCT) and Dark Western Tobacco (DWT) consume 12m³ and 20m³ cubic meters of wood (stacked) per 1000 kg of cured tobacco, respectively. The law requires that the grower plant 320 tree seedlings every year for eight years for every hectare of tobacco grown. On the other hand, burley tobacco requires 160 poles for every hectare of tobacco grown. According to observations by ARET, most of the estates have started responding positively to the call to plant trees on their land. However, the problem of non-compliance on having sustainable wood supplies affects most smallholder farmers, who have cited shortage of land as a contributing.



Firewood for curing tobacco, Msunga Estate ©D Mauambeta

With the liberalization of tobacco growing since 1990, the number of smallholder farmer clubs has grown from 29 in 2000 to 884 in 2009/2010 season for the Flue cured tobacco and 14,873 in 2000 to 38872 in 2009/2010 for burley tobacco; but has declined for Northern Division Dark Fired tobacco from 2185 in 2000 to 514 in 2009/2010 (Table 4).

Table 4: Number of registered tobacco smallholder clubs 2000 to 2009/10

Year	Burley	Flue cured	NDDF¹
2000	14,873	29	2,185
2001	13,768	140	2,283
2002	21,933	199	2,105
2003	18,288	175	5,030
2004	14,322	375	2,106
2005	19,610	451	548
2006	27,091	505	564
2007	14,988	460	428
2009/2010	38,872	884	514

Sources: Tobacco Control Commission (TCC) 2000-2007(www.tccmw.com); Graham Kunimba, TCC (2010)

On the other hand, the number of registered estates has declined from 48,688 in 2000 to 10,775 in 2009/10 for burley tobacco; 1100 in the year 2000 to 456 in 2009/2010 for Flue Cured tobacco and 12,045 in the year 2000 to 489 in 2009/2010 for Northern Division Dark Fired tobacco (Table 5).

¹ Northern Division Dark fired

Table 5: Number of registered tobacco estates

Year	Burley	Flue cured	NDDF
2000	48,688	1,100	12,045
2001	45,836	1,094	12,512
2002	44,216	1,830	10,129
2003	31,069	693	6,993
2004	25,381	706	2,948
2005	22,429	537	587
2006	19,500	747	279
2007	10,750	445	119
2009/10	10,775	456	489

Sources: Tobacco Control Commission (TCC) 2000-2007(www.tccmw.com); Graham Kunimba, TCC (2010)

Although most tobacco estates have been observed to comply with the requirement of having sustainable wood supplies, the Department of Forestry has reported massive destruction of indigenous forests from government protected forest reserves in Mangochi District by tobacco estates. The fundamental problem is that while strict laws are applied for maintaining high standards of tobacco processed leaf, non-compliance of the afforestation law is regrettably tolerated by the responsible regulatory authorities.

2.4.3 Agricultural expansion

Agriculture expansion is another leading cause of deforestation in Malawi. Rapid population growth, coupled with heavy reliance on agriculture as the main source of livelihoods by the majority of population, is the main driver of change. Over the past 18 years, agriculture land has expanded significantly (Table 5). Government of Malawi-BEST (2009) estimates that from 1991 to 2008, land under intensive agriculture has expanded by 630,000 ha, representing 20% increase, while extensive

agriculture² has expanded by 2,852,000 ha, representing 7% increase. The expansion generally occurs on woodland, resulting in the shrinkage of the forest area.

Table 6: Land use types for Malawi (1991-2008)

Land use category	1991		2008		Change (1991-2008)	
	Area ('000 ha)	%	Area ('000 ha)	%	Area ('000 ha)	%
Intensive agriculture	3,091	33	3,721	40	+630	+20
Extensive agriculture	2,669	29	2,852	30	183	+7
Forest, woodland and plantation	2,657	28	1,988	21	-669	-25
Grasslands	766	8	614	7	-152	-20
Miscellaneous	216	2	224	2	+8	+4
Total	9,399		9,399			

Source: Government of Malawi-BEST (2009)

Cases of encroachment in form of cultivation into forest reserves are sporadic. For example, the Department of Forestry reported (February 2010 Progress Report), 500 ha as having been encroached in the Mchinji Forest Reserve. In the same Mchinji encroachment case, it was reported that the farmers who had encroached the forest reserve were issued with farm input coupons by District Agriculture staff without checking the gardens. This case represents a typical case of conflict of policy strategies. Political interference tends to encourage people to encroach into forest reserves. For example, the former MP in Mchinji is quoted as having encouraged constituents encroaching in the forest reserve. In a similar case, a politician in TA Kunthembwe, Blantyre, had this to say during an agriculture show which was held on 29th June 2010: *Mr. District Commissioner, we ask you (the government) to identify alternative incomes for the people of this area so that they stop burning charcoal.* Indeed,

² Extensive agriculture is defined as farming in wooded or grassy areas, with 20% to 70% of the land cultivated (Government of Malawi-BEST, 2009).

this points to what one commentator said about what most politicians believe, *Do as much as possible, but don't threaten voters' comfort or convenience*, (Anon).

2.4.4 Biomass Energy and Non-Energy Demands

According to the Government of Malawi- BEST 2009, The household sector is the dominant energy user and accounts for 83.2% of total energy consumption. This is followed by the industrial sector (11.9%), with the transport and service sectors accounting for 3.8% and 1.1% respectively.

Biomass is Malawi's main source of energy, mainly in the form of wood. It accounts for an estimated 88.5% of total demand, ranging from 98% in the household sector through 54% in the industrial sector and 27% in the service sector to 5% in the transport sector (Government of Malawi- BEST 2009)

In terms of wood equivalent (w.e.), the total demand for biomass energy in 2008 is estimated at 8.92 million t. w.e. (air dry) or about 13.5 million m³ solid¹⁵. Wood and other forms of biomass are used for additional (non-energy) purposes such as construction, joinery and furniture. The additional demand for these applications is about 1.5 million m³ for wood products alone (Government of Malawi- BEST 2009)

While much of the demand for household energy in rural areas is met by self-collection, most urban biomass is purchased and practically all biomass for non-household uses is purchased or plantation-grown for own use. This makes biomass the most important commercial fuel in the country, in terms of economic value, employment and energy security (Government of Malawi- BEST 2009).

Table 7: Total national energy demand in Malawi, by sector and fuel

Sector	Energy demand by fuel type (TJ/Yr)					
	Biomass	Petroleum	Electricity	Coal	Total (TJ/Yr)	Total (%0
Household	127574	672	1798	5	130,049	83.2
Industry	10,004	3,130	2010	3481	18,625	11.9
Transport	270	5,640	35	15	5,960	3.8
Service	452	558	477	174	1,661	1.1
Total	138,300	10,000	4,320	3,675	156,295	
Total (%)	88.5	6.4	2.8	2.4		

Source: Government of Malawi -BEST 2009

2.4.5 Brick burning

A lot of wood is also needed for brick burning. Deforestation is acute around major cities, *bomas* and towns in Malawi because of the need to supply burnt bricks to cities. In Lilongwe, for example, the demand for wood for burning bricks has exerted pressure on mango trees in communal areas and indigenous trees in graveyards (personal observation, Mauambeta 2010). Brick burning and use of wood from unsustainable sources is common throughout Malawi, especially at the fringes of cities and towns. The stud unveiled brick burning activities at Mutu wambuzi and Banana in Bangwe, Area 10 in Machinjiri, Nanjiri in Lilongwe, Mpondasi and Koche in Mangochi and many other places.



Brick burning at Mutu wa Mbuzi-Banana in Bangwe

Photo: Daulos Mauambeta, 2010



Brick burning at Koche, Mangochi;
Photo: D Mauambeta, 2010

2.4.5 Urbanization

While the Malawi population still remains largely rural, with only 17% of Malawians living in urban areas, the urban population has been increasing rapidly and is projected to reach 22% by 2015 (BEST 2009). Of the total population in Malawi in 1998, 14 percent lived in urban areas. However, 11 percent of the total population lived in the four major urban areas and only 3 percent lived in the other urban areas (*bomas* and townships). Furthermore, urban population in Malawi had grown from about 850,000 in 1987 to around 1.4 million in 1998. This represents an annual growth rate of 4.7 percent and an increase of 68 percent during the 1987-1998 intercensal period (Government of Malawi 1998)

In 2008, there were minimal differences in the intercensal annual growth rate amongst the four cities. The annual growth rates for Lilongwe City was 4.3%, Mzuzu city, 4%, Zomba city, 2.9% and Blantyre city, 2.8% (Government of Malawi, 2008).

Given that urban residents are the main consumers of commercially traded fuels, this progressive urbanization of the population, in tandem with the rapid overall growth rate, have major implications for the growth of commercial wood fuel demand for cooking, heating, and burning bricks.



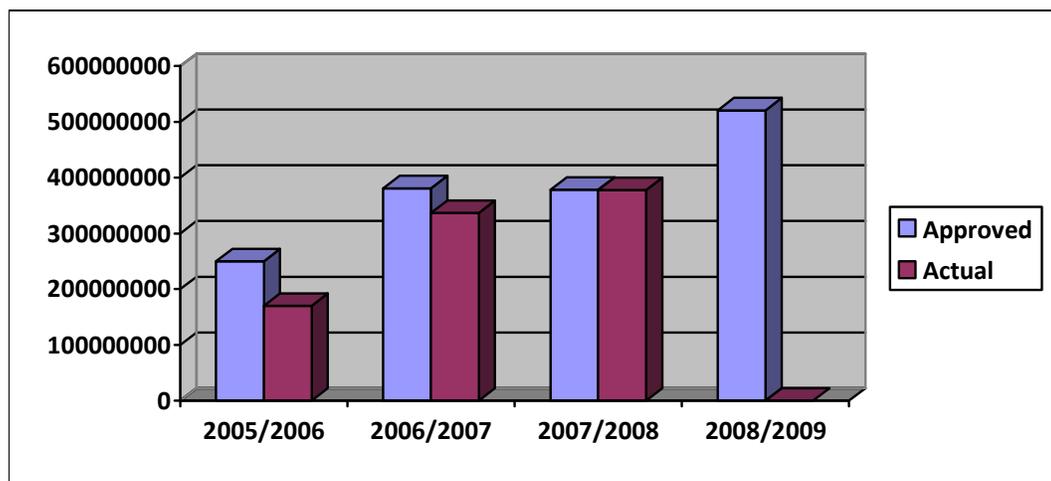
*Roadside firewood sales at
Jumbe, Blantyre*

D Mauambeta, 2010

2.4.6. Inadequate budgetary support from Government

In general, operational budget for forest management activities is inadequate. The Department has also been getting less money than the approved budget, refer Figure 4.

Figure 5: Recurrent Budgets and Estimated SLM Expenditure of the Department of Forest (MK)



Source: FAO and Terra Africa 2009

Table 8 shows that personal emoluments constitute a greater proportion of funds allocated to the Department of Forestry with a ratio of 9:1 currently. Salaries represent 83-93% of the total FD budget which has over 6000 members of staff working at FD headquarters, regional offices, district offices, research and training, forest reserves, plantations and customary forest areas.

The largest spending programs are extension services and conservation and development whilst law enforcement is allocated less. In line with decentralization in Forestry, the district offices started receiving direct funding for forestry management from 2009 financial year. Prior to this arrangement, district offices received funds through the regional offices which were either inadequate or non-disbursed. As a result forestry development efforts are not significant. Coupled with inadequate law enforcement and other exogenous factors and drivers the country is in a spiral of forest degradation.

Table 8 : Recurrent budget and estimated SLM Expenditure of the Department of Forestry ('000 MK)

	Approved 2005/2006	Actual 2005/2006	Approved 2006/2007	Actuals 2006/2007	Approved 2007/2008	Preliminary Actuals 2007/2008	Approved 2008/2009
All cost centres together (1)							
PE	304848	270661	465608	435320	482702	471849	556022
ORT	25553	28566	89580	89949	58741	36841	64316
Total	330401	299227	555188	525269	541443	508690	620338
Total expenditure of HQ, regions and districts							
PE	291289	201448	417131	373 770	414043	413515	542080
ORT	21395	17363	24334	22660	30311	29627	58914
Total	312684	218811	441465	22660	444354	443142	600994
Total SLM expenditure of HQs regions and districts							
PE	244485	164379	372740	329430	367994	368012	486395
ORT	5512	5492	8197	7217	10414	9836	34626
Total	249996	169871	380937	336647	378408	377848	521022
SLM expenditure by programmes and sub-programmes							
13: Environmental Protection and Conservation							
08 Enforcement of law and Policy	38974	26974	10884	10429	10946	10947	14572
10 Extension Services	87820	72499	172176	161911	183423	183814	218537
17 Conservation & Development of NR	122190	70147	197199	163763	183315	182893	263033
27 Manpower development and Institution Strengthening							
22 Environmental Forestry Management	999	251	679	544	724	644	1352
Districts	0	0	0	0	0	0	23527
Total	249983	169871	380938	336647	378408	378298	521021
SLM expenditure by cost centre							
Headquarters	7624	5672	6560	6306	7639	5432	6635
Regional Forestry Office (South)	134355	72559	218739	168182	206355	206268	280134
Regional Forestry Office (Centre)	54435	52467	118786	125322	126537	128967	167022
Regional Forestry Office (North)	53582	39174	36852	36837	37877	37181	43705
Districts	0	0	0	0	0	0	23527
Total	249996	169872	380937	336647	378408	377848	521023

Source: FAO and Terra Africa 2009

3.0 THE POLICY AND LEGAL FRAMEWORK, STRATEGIES AND ACTIONS

3.1 Policy and legal framework

The Forestry Sector in Malawi is governed by a number of policy and legal instruments. These are briefly outlined below.

3.1.1 The Malawi Constitution

The Malawi constitution is the supreme law of the land. The government in 1995 adopted a new Republican Constitution which calls for sustainable management of environment and natural resources as well as the participation of all people in Malawi in the national development processes. Since the new constitution was adopted, a number of sector policies such as forestry, fisheries, wildlife, water, land and others were reviewed. Within the same period the government approved the Decentralization Policy (1998) which aims at giving decision making power to the local people.

3.1.2 Vision 2020 and Malawi Growth Development Strategy

In line with international developments, the Government of Malawi also developed other national policy documents and strategies such as the Vision 2020 and the Malawi Growth Development Strategy (MGDS) of 2006 and others. The Malawi Growth and Development Strategy goal on forestry is to reduce environmental degradation with the medium term expected outcome of ensuring sustainable use and management of forestry resources in Malawi. It is also expected that an estimated 200,000 hectares of forest-land is expected to be replanted by year 2011 in-order to reverse negative impacts of deforestation.

In order to achieve these, the MDGS has outlined five strategies:-

- Improving productivity and value added by the industrial forestry sector, while balancing it with sustainable practices
- Increasing forestation efforts for key are;

- Improving enforcement of regulations for forestry management
- Initiating afforestation and environmental rehabilitation programmes in priority areas; and
- Introducing incentives for private sector participation in forestry.

However, the Strategy does not connect the role of sustainable forest management in energy supply and in the creation of viable jobs, or the opportunities for private sector development related to biomass supply.

3.1.3 The Malawi Forestry Policy and Legislation

The Department of Forestry produced a Forestry Policy in 1996 and its related legislation in 1997. These were followed by the Community Based Forestry Management Policy Supplement of 2001.

While these instruments are comprehensive enough to ensure the sustainable management of forestry resources in Malawi, they lack enforcement and implementation.

3.1.4 The National Forestry Programme (NFP)

The Malawi Government developed a National Forestry Programme to guide implementation of the National Forestry in 2000 with an overall goal of achieving sustainable management of forest goods and services for improved and equitable livelihoods. The NFP had set twelve priorities for improving forestry and livelihoods in Malawi (Malawi Government, 2000).

Using the NFP as a guide, a number of forestry projects and programmes were supposed to be implemented in Malawi. A decade later, Malawi still continues to face critical challenges in the implementation of the NFP, evidenced by illegal tree cutting in all forest reserves and plantations; illegal charcoal production and trading across Malawi; and many others. The forestry resources have become a tragedy of the commons- free for all. A case in point is the Chongoni Pine Plantation in Dedza which is being cut illegally with grossly low enforcement by authorities. Again, charcoal production and trade in Malawi has reached critical proportions, to such an extent that charcoal is being produced along roadsides and transported in day broad light without any actions from responsible authorities. In general, the NFP has just become a reference document for preparing other documents rather than acting as a

reference for implementing programmes. For example, an assessment by June 2010 training workshop on NFP held in Salima vividly indicated that the NFP process was not proactive.

3.1.5 Standards and Guidelines for Participatory Forestry

Following many guidelines, field manuals and extension kits prepared in the past, in 2005 the Government of Malawi developed Standards and Guidelines for Participatory Forestry in Malawi. This document sets standards and guidelines for improving forest governance and rural livelihoods.

3.2 Forest and Tree Management in Malawi

The Government of Malawi, through the Department of Forestry, has implemented a number of large-scale projects to create sustainable supplies of timber and fuel wood. Examples of such programmes and projects are presented below. According to Kafumba (1984), the government started creating additional supplies of wood in the 1966/67. Some of these actions are captured under this section.

3.2.1 Wood Energy Plantations

The global energy crisis that occurred in 1970's prompted governments, including Malawi to create wood energy sources. This prompted the Malawi government to launch the Wood Energy Project in 1980, financed by the World Bank. The objective of the project was to improve fuel wood and pole supplies to both rural and urban population for domestic and commercial purposes (Wood Energy Appraisal Report, 1979). The project established 12, 000 ha of fuelwood plantations and 88 tree nurseries throughout the country. The project had an extension to the second phase, which established 2,800 ha of fuel wood plantation at Mulanje.

3.2.2 Blantyre City Fuel wood Plantations

Realizing the dwindling forest resources on customary land, the Malawi government, with funding from the Norwegian Agency for Development Cooperation (NORAD) implemented the Blantyre City Fuelwood Project from 1987 to 2001. The objective was to contribute to fuel requirements of low-income groups living in Blantyre and Zomba. A total of 4,700 ha were established on customary land in Blantyre, Chikwawa and Zomba Districts. However, all the plantations were later handed over to 98 village local communities in 2001, as part of decentralization process and poverty reduction strategy.

Tree planting programmes undertaken by the general public, initiated during the projects, together with the fuel wood plantations have contributed significantly to alleviating fuel wood problems for both domestic and commercial uses. Observations indicate that most of the wood currently being sold in urban areas of Blantyre and

Zomba come from these fuel wood plantations and woodlots established by the general public.

Although the government created large forest plantation resource, most of it has been degraded due to theft, overexploitation and uncontrolled bush fires. For example, significant large proportions of BCFP plantations have been destroyed (Figure 1). Limited funding by the government to manage the fuelwood plantations and sustain extension services for the BCFP plantations has been the major challenge.



Fig. 1 (left): Mpemba Hill in TA Somba, Blantyre and 2 (right): Namisu Hill in TA Kumthembwe, Blantyre. All these hills were afforested under the Blantyre City Fuelwood Project (1987-2001), but later the plantations were handed over to the local communities. The plantations have been degraded. *Photo credit: Reginald Mumba, 2010*



Fig. 2: Illegal charcoal burning in Namisu community plantation

3.2.3 Improved Forest Management for Sustainable Livelihoods Programme (IFMSLP)

The programme focuses on improving the management of trees and forest resources, improving access to income generating opportunities and enhancing rural livelihoods through sustainable management of forest areas in the country, and the programme is financially supported by the European Union. The first phase ended in August of 2009 and activities planned for the second phase are expected to resume immediately after the activation of the Forest Management and Development Fund.

The Improved Forestry Management for Sustainable Programme (IFMSLP) operates in 12 of Malawi's 27 Districts, namely:- Chikhwawa, Chitipa, Dedza, Karonga, Kasungu, Mchinga, Mzimba, Nsanje, Ntcheu, Ntchisi, Rumphu and Zomba. Table 6 below provides forest area covered by the programme, which is under co-management.

Figure 6: Improved Forestry for Sustainable Programme (IFMSLP) Sites

District	Forest	Forest type	Area (Ha)
Chikhwawa	Masenjere Escarpment	Communal	171654
Chitipa	Mughese	Reserve	736
	Wilindi	Reserve	907
	Matipa	Reserve	1,060
Dedza	Mua-Livulezi	Reserve	12,147
Karonga	Vinthukutu	Reserve	2,334
	Karonga South Escarpment	Reserve	10,800
Kasungu	Chawa	Proposed	538
Machinga	Liwonde	Reserve	27407
Mzimba	Mtangatanga	Reserve	9,770
	Perekezi	Reserve	15,370
Nsanje	Matandwe	Reserve	26,205
Ntcheu	Dzonzi -Mvai	Reserve	8,292
	Dzonzi-Mvai	Pine plantation	3,164.32
Ntchisi	Ntchisi	Reserve	9,720
Rumphu	Uzumara	Reserve	596
Zomba	Zomba	Reserve	5,937
	Malosa	Reserve	8,599
	Customary Forests	Customary	2,404.8

The IFMSLP has developed interventions that aim at contributing towards increased household income and food security. The interventions range from tree planting and forest conservation to the promotion of forest based income-generating activities such as honey, mushroom and timber production and processing.

The programme has facilitated development of management plans and co-management agreements between Government and local communities living around forestry reserves. During the lifespan of the programme over 8 management agreements were signed between Government and Village Natural Resource Management Committees through their Block Committees. The signing of the management agreements for example in Malosa, Zomba and Liwonde Forestry Reserves improved access to natural resources by communities.

People interviewed indicate that extensive woodlots and woodlands have been planted and protected and some wild game such as duikers, rabbits, hyenas could be spotted in some woodlands areas where co-management is taking place.



Liwonde Forest Reserve from outside; Illegal activities ongoing inside;
Photo credit: D Mauambeta, 2010

However, despite these agreements, encroachment and charcoal production continued uncontrolled in other forest reserves. Since the project was implemented in selected areas, people from the non project areas interpreted the co-management agreements to mean that government had approved cutting down of trees in forest reserves. Though the blocks under co-management agreement were not seriously affected by encroachment and charcoal burning, the surrounding and nearby areas were affected by heavy deforestation and encroachment for farming like in the case of Malosa and Zomba Forestry Reserve.

3.2.4 Forestry Replanting and Tree Nursery Project (FOREP)

FOREP is a government of Malawi supported project, which aims at rehabilitating the degraded industrial forest plantations to ensure sustainable supply of timber to both the wood processing and the construction industries. The project encourages planting and management of trees in selected industrial timber plantations. During the year under review, the department with funding from the project planted 901.76 hectares in different industrial softwood plantations. In addition, the project funds assisted in the management and protection of the old stands from fire within the plantations.

3.2.5 Tree Planting and Management for Carbon Sequestration and Other Ecosystems Services

This is another Malawi government supported project in the Department of Forestry, named the Tree Planting and Management for Carbon Sequestration and Other Ecosystems Services (TPMCSOES). The project promotes tree planting and management by giving financial support to farmers. Farmers are financially compensated for the land that they put aside for tree growing and subsequently paid for trees that survive. So far, a total 319 farmers have participated in tree management, covering 517.9 hectares since the project inception in 2006/2007 season.

3.2.6 The Income Generating Public Works Programme (IGPWP)

Another programme run by Government of Malawi with funding from the European Commission is *The Income Generating Public Works Programme (IGPWP)*. The programme was designed to promote income generating activities as well as productive activities for the rural and peri-urban poor. One of the objectives to develop productive local forestry and agriculture activities. The target is to plant 42,500,000 trees and assist in the management of 2,250 ha of existing forest areas. To date 37,500,000 trees have been planted and 1,800ha of existing forest area has been managed (Rose Bell, Personal Communication, July 2010).

3.2.7 Sustainable Management of Indigenous Forests (SMIF) Project

Community-based forest management is a strategy being adopted by many governments in developing countries. One objective is to enhance local control of,

and benefits from, local forest resources. The Wildlife and Environmental Society of Malawi (WESM) has been implementing a community-based project called "Sustainable Management of Indigenous Forests" (SMIF) at Kam'mwamba in Neno District (formerly known as Mwanza East).

The Sustainable Management of Indigenous Forests Project (SMIF) was implemented in 1996 with an objective of sustainably managing these forests through tree planting, encouraging natural regeneration, fire protection and engaging the communities in a number of income-generating activities (IGAs) such as bee keeping (honey production), fruit juice making and guinea fowl rearing.

242,021 trees of various species were planted for soil amelioration, firewood, timber and nutritional (fruits) purposes over the project period. This translates into 96.8 hectares of forest cover if planted at 2 m x 2 m spacing. Most of the trees were planted by individuals (181,144 trees). This means that 0.48% of the project area has been brought under forest cover.

Following an initial inventory conducted in indigenous forests in 1998, a second inventory was executed to determine the impact of the project interventions on the forest cover.

Results have revealed that the overall indigenous forest cover has increased by over 30% in stocking from 1998 to 2006 with the individual forest areas (IFAs) under strong leaderships gaining 68.50% in forest cover. The village forest areas (VFAs) forest cover increased by over 48%. The individual forest areas under weak leaderships attained the lowest forest cover increase (24%) over the same period.

Most of the IFAs fall under weak leadership and are largely degraded due to charcoal burning.

Remaining forests in Kam'mwamba set on fire

Photo: Daulos Mauambeta, 2010



3.2.9 Bwanje Rural Environmental and Development

Organization (BERDO)

BERDO is based in Ntheu District in the Bwanje Valley. BERDO is implementing livelihood security and watershed management projects amongst many other projects focusing on income generating activities. The two main goals of these projects are:

- A. Improved sustainable livelihoods in Bwanje area particularly of female headed and HIV and AIDS affected households
- B. Participatory watershed management in the Bwanje valley

Between 2009 and June 2009, a number of trees were planted and managed by communities in this area.



Trees planted in the Bwanje Valley

Photo: Daulos Mauambeta, 2010

Sendwe Community Forest, D. Mauambeta 2010

3.2.10 Sendwe Village Forest Area, T.A Khongoni, Lilongwe

Sendwe Village Forest Area is situated to the North-West of Lilongwe City. Between 1980 and 1997, all trees in the VFA were wantonly cut by the communities around the VFA. This resulted into a bare hill of Sendwe. In 1998,



traditional leaders and extension workers from Forestry Department and wider communities from six villages held the first six hour meeting for Sendwe conservation. They developed and agreed on a set of objectives and by-laws. There were two main objectives: promoting and protecting regeneration of natural trees to increase forest products; and encourage sustainable utilization of the forest products. In 1999, the community tilled the whole bare hill, planted 4000 seedlings of *Senna siamea* which did not survive because they were suppressed by regenerated natural trees. In 2000, they decided to encourage regeneration of trees from tree stumps and roots. They also promoted the growing and planting of agroforestry trees and exotic trees as woodlots, homesteads and boundary planting. In that year, Sendwe community had worn MK30, 000.00 for properly managing the largest VFA in Malawi measuring 73ha using natural regeneration.

3.2.11 Rivirivi River Catchment Management Project

In Balaka District, local communities along the Rivirivi River decided to address poverty-environment issues at local and ecosystem level in 2006 with support from WESM Balaka Branch. Rivirivi River flows down into River Shire from the Dzonzi – Mvai forest. Although the river was once perennial, it had become reduced to a few pools in the dry season. This was affecting local livelihoods, dependent on the river for watering livestock, washing and fishing. WESM Balaka Branch and communities identified the clearance of forest vegetation from the river banks as a key factor affecting river flow, and so began a project, funded by the Malawi Environmental Endowment Trust (MEET), to try to reverse the situation.

The project covers about 40 km of river and 25 villages, and is focused mainly on environmental management – reforestation, agroforestry, water-harvesting, and the use of vetiver grass to control erosion. To implement the project WESM works very closely with government extension services from the departments of agriculture and forestry. Not only does this allow the project to benefit from the capacity of these agents in the area (about 2 extension agents) but it also helps with skills transfer, and ensures some continuity and sustainability beyond the end of project funding.

3.2.12 Chingoli Village Forest Area (Bisa Hill), T.A. Nkula, Machinga

This was initiated by Greenline Movement in the mid 1990s. The hill was completely bare and as GLM started sensitizing the village heads in 1994, the meetings were held just below the hill where the house of the Group Village Headman Nkula was. Because of the interest the GVH has, he made a request to his people not to cut

down any trees in the hill. Fortunately, they complied and little by little the hill began regenerating naturally. GLM involved the surrounding community in agroforestry and soil conservation activities. Later on they were trained in bee keeping and honey processing and as of now there are more than 20 bee hives with 15 of them colonized. The group has already started benefiting from sale of honey and members are able to buy fertilizer from these sales. In addition to this soils where mushrooms grow were transferred from the forest reserve to the hill resulting in people harvesting mushrooms from a hill that was unproductive.

3.2.13 Howe Village Forest Area, T.A. Mlumbé, Zomba

This came into being because of the in born interest of Village Headman Howe. This legacy has passed on to all other followers of the chieftainship. Trees are only felled if they are meant to benefit the entire village.



Same hill, different results:- The bare side of the hill, under weak traditional leadership; the tree covered side under strong leadership; Ntcheu.

D Mauambeta, 2010

3.2.14 Graveyards

Grave yards, *Manda*, are now the only forest islands that one can see in the Malawi landscape in addition to dotted fruit trees and small private woodlots and trees around homesteads and in gardens. *Manda* are now the only true representative of Malawi native or indigenous trees because most of inhabited areas have been planted with exotic species dominated by eucalyptus trees. *Manda* are also areas having some high biodiversity levels in Malawi after protected areas.

Graveyards have stood the test of time because of the traditional values and beliefs associated with such areas. Malawians believe that ancestor spirits live there.

Amongst the Chewa people, this is also where the, *Dambwe*, the home of the Nyau Cult (Ngule Wa Mkulu) is based. Therefore, clearing grave yards is tantamount to uncovering shelter for the ancestor spirits; and unmasking the Nyau cult.



Manda in the middle of the photo; near Madziabango, Blantyre. Photo: D. Mauambeta 2010

These acts are heavily punished by traditional leaders who are custodians of these norms. It is important to encourage the conservation of *Manda*. However, *Manda* have recently become victims of deforestation as greedy traditional leaders have started to sell trees for firewood for brick burning especially in areas adjacent to cities and towns like in Chiladzulu and Lilongwe Districts.

4.0 ANALYSIS OF ISSUES

Despite the many forest projects and programmes the Malawi Government and its partners have put in place to address issues of deforestation and environmental degradation in Malawi, there are still critical challenges

4.1 Land tenure and ownership of trees and forests

Almost all the land that is under customary law is under open access property regime within a particular village jurisdiction, and to some extent, transcending to other villages depending on the strength of the village authority. That is to say, residents of a certain village can access the forest goods within their village without any limit of quantity, and the same may apply to another village under the influence of rent-seeking (by palm-oiling village authorities or socio-cultural connections). Farming land is generally under some form of control by the nominal owners, but the adjacent woodland area tends to be subjected to open access regime. Attempts to exercise rational control over the woodlands by village authorities has sometimes weakened intra and inter-village social capital; accusing such authorities of following strange customs, for there is general belief that land outside the farm land belongs to everybody. This scenario is common in sparsely populated areas, unfortunately, that is where there is potential for restoring the regenerating forest resources. Unless there is a strong drive to sensitize village authorities practice village common property resource regimes, by reviving Village Forest Areas (VFAs), forest degradation will continue unabated.

4.2. Policy and Implementation Failure

Just as the forest goods and services have transcendent impacts on the economy and general livelihoods of local communities, implementation of the national forest policy needs active participation of a wider sector. While sector-wide approach in implementing programmes has been launched in the health and agriculture sectors, forestry sector appears to be grappling with the challenges of forest degradation

with limited support from other sectors. Hence, under policy instruments, the following issues need serious attention.

4.2.1 Influence of politics (single to multiparty to democracy)

While lobbying politicians to spearhead implementation of strategies to reduce deforestation is appealing, it has become an elusive strategy. It appears politicians become active in forestry issues when it involves tree planting, but even then, their participation is short-lived and the drive to participate is not internalized, but comes from elsewhere. Issues of control of indigenous forests on customary land and protection of protected areas are thorny. The other challenge of involving politicians on forest issues is that while politicians tend to focus on short-term benefits, the forest resources and their associated goods and services have long-term benefit streams. This problem is aggravated by failure by most development agents to engage the constituents at the grassroots level in advocating for improved forest condition.

4.2.2 Laissez-faire approach to forest management

A number of questions can be raised under this issue. Who displays the laissez-faire approach? Is it the Department of Forestry (DoF)? The general public? The political leadership? One would point fingers at the Department of Forestry. But the management of forest resources is a shared responsibility for the reason that the benefits (costs) of managing forest goods and services transcend different sectors at both local and national economy. The laissez-faire approach could be creeping in the Department of Forestry because of frustrations of low funding (as it has been highlighted above), which could in turn, be due to lack of appreciation of the role the forest sector plays on the part of policy makers. However, the above statements should be in no way exonerating the DoF from exercising its legal mandate as the lead institution in ensuring that forest conservation and management are done. Similarly, stakeholders in the forest sector should help keep the fire of activism, with relevant actions on the ground, burning.

4.2.3 Professional concubinage

There is no doubt that all those who have gone through secondary school education (even primary school education) have learnt the importance of tree planting and forest conservation, and that the use of unsustainable resources that contribute to

environmental (forest) degradation have serious negative consequences in the realm of sustainable development.. However, the general observation is that what has been learnt at school is serving the satisfaction of just passing exams and obtaining a certificate (*basi*). Observations and studies (Mauambeta et al July 2010) have revealed that most of the estates owned by Malawians, particularly in the tobacco industry, do not observe the regulation that 10% of the land should be under active forest management. In addition, even most of the people who have gone to formal education have not demonstrated at respective villages by either planting trees or conserving forests. Unless, we put into practice the environmental knowledge we have acquired, and avoid practices that result into forest degradation, we are likely to succumb to professional concubinage.

4.2.4 Corruption

Corrupt practices amongst some staff working in the Department of Forestry are contributing to illegal off take of timber in plantations and forest reserves. Corruption is going on to facilitate illegal timber, allocation of logging plots, production and trafficking of charcoal and similar activities in public forests. The recent case of five officials from the Department of Forestry at Chikwangawa who were arrested by the Anti-Corruption Bureau (ACB) in August 2010 (The Nation, 25th August 2010) is just a tip of an iceberg. The ACB needs to extend and intensify investigations in areas such as Chikwangawa, Mulanje, Zomba-Malosa, Machinga, Dedza, Phirilongwe, Dzalanyama and similar forest reserves and plantation to flush out corrupt officials.

4.2.5 Poor Governance at local level

There are different perspectives of governance within the realm of forest sector. But this analysis will focus on power relations among local institutions that have a bearing on control of access to forest resource benefits. The control over forest resources by traditional leaders has generally been weakened due to socio-political changes. This has resulted in the emergence of so called democratic institutions such as the Village Natural Resources Management Committees (VNRMCS) whose legitimacy, when it comes to collective effort to manage forest resources, is generally contentious. The democratic values in the socio-cultural fabric life of the rural Malawian have not yet been internalized. Benefit sharing has become a contentious issue under democratic institutions just as under traditional leadership. Cases of elite capture have been reported sporadically in benefit sharing mechanisms affecting forest resources, resulting in frustrations for the less privileged individuals who have

vented their frustrations by over-harvesting the forest (Zulu, 2008,). Lack of systematic monitoring mechanisms by District Councils has exacerbated the situation.

4.2.6 In-efficient administration, weak leadership and poor governance

The study has identified in-efficient administration, weak leadership and inadequate capacity to manage the available human resources in the Department of Forestry. For example, the Forest Management Board which is supposed to guide Department of Forestry has met less than three times since the Forestry Policy was enacted in 1996. Similarly, no staff planning and management meetings are held on a regular basis by the forest administration. These are missed opportunities as it is during such meetings that problems and challenges facing the department could be discussed as a team, and common solutions sought because *mutu umodzi suzenza denga*.

4.2.6 Funding and its prioritization

Despite establishment of the Forest Management Fund in the Forest Legislation in 1997, it has never been made operational, and this has severely affected financing of forest operations, as normal government allocations to the DoF have consistently remained far below the optimal levels for a long time. Although financing forest operations can have multiple sources, with multiple stakeholders, the DoF remains at the driving seat of the process in the forest sector, hence it to have adequate funding.

While the DoF earns some sympathy for low funding, the issues of prioritization for the funds allocated to it need to be considered. Observations indicate that most of the Other Recurrent Transactions (ORTs) funds allocated end up being used for leaves grants as DoF has a large unskilled labour force. Worse still, most of the operations in forest plantations are not contracted out, and this results in having a squeeze in the allocation of funds for extension services, which are vital considering that most of the forest resources exist on customary land where extension services are badly needed.

Budget tracking measures have not been undertaken by Civil Society Organizations (CSOs) to monitor efficiency and effectiveness of fund utilization, just as it has been the case in other sectors such as education and agriculture.

4.4 Globalization and Structural Adjustment Programmes (SAPS)

Introduction of SAPs in most developing economies, Malawi, inclusive, resulted in reduction of funding in the public sector, affecting a number of programmes such as forest protection, forest plantation management, and extension services being shelved.

On the other hand, other outcomes of globalization in form of conventions such as CBD, Kyoto protocol, FAO NFP Facility and many others provide opportunities to solicit funds to finance programmes under the forest sector,

In Malawi, the impending ban on growing burley tobacco may have far reaching negative impacts on forest conservation. It is given that most people who will be out of tobacco business will start trading in forest goods as a safety net before settling for other alternative livelihood strategies. In the process, this will escalate deforestation.

4.5 Forest data collection, analysis and dissemination

Unlike demographic data and information which are collected every ten years, forest cover data is collected irregularly and after a long period of time, well behind the rate of change of population characteristics. For example, the latest comprehensive forest cover data was collected in 1991. While it is appreciated that national forest cover data collection and analysis are costly, it should be noted that ignorance on the part of forest cover data could be more costly because costs associated with environmental degradation are generally high and slow to reverse.

Poor presentation strategies of the collected data/information to the target stakeholders has resulted in poor understanding of the environmental change drivers among stakeholders, resulting in most stakeholders to choose to have a laisey faire attitude towards deforestation.

5.0 RECOMMENDATIONS

5.1 Effective Policy Implementation

While the forestry policy and legislation framework is comprehensive enough in Malawi, it needs to be effectively implemented. The current state of affairs cannot be tolerated to continue unchecked.

5.2 Recovering land forest cover

Malawi continues to lose its forest cover. However, there is an opportunity for Malawi's forest cover to positively change if tree planting and management is done by all Malawi, especially on customary land. Government needs to encourage all Malawians to plant and conserve trees in any open spaces such as around homes and villages, agro-forestry trees in and around gardens, encourage natural regeneration on bare hills; and stop the tendency of cutting trees anyhow.

5.3 Survival rates of planted trees

Every year, Malawi is said to be planting trees. A lot of financial resources are being used for launching the national forestry season, followed by regional and district launching functions. These ceremonial functions use of financial resources compared to the output (the actual trees planted). Furthermore, very few of trees that are said to have been planted survive. There is need for Government and its partners to put in place a tree planting and management strategy which will monitor the planted trees until they are fully grown.

5.4 Alternative energy sources

It is a fact that majority of Malawians will continue to use biomass energy (firewood and charcoal) for several years to come. Both firewood and charcoal are forms of renewable energy because trees can regenerate. It is also a reality that Government will not manage to stop charcoal production and trade in the short term because of the politics and economics around this business. Above all, many people in Malawi will not be connected to the electricity grid due to incompetencies and inefficiencies in the way ESCOM is working, and also due to high prices of electrical appliances.

- 5.4.1 Therefore, there is need for Government to encourage tree planting on commercial basis to supply firewood to those that will still continue to depend on firewood.
- 5.4.2 There is also a need for Government to start implementing its policy and legislation on charcoal production to ensure that only those that qualify can produce and trade in charcoal business (i.e. those that have a sustainable forest with a management plan and a license from the Department of Forestry);
- 5.4.3 Having put a mechanism on charcoal production and trade, the Department of Forestry and its partners will have to train charcoal makers to produce charcoal more efficiently. Current methods of making charcoal are rudiment and waste a lot of trees.
- 5.4.4 Government also needs to encourage other forms of renewable energies such as mini-hydro power stations, solar energy through the establishment of solar powered villages especially where there is potential solar power and wind power.
- 5.4.5 Government needs to encourage ESCOM to totally phase out post paid meters and scale up prepaid meters so as to facilitate revenue collection to improve performance, increase new connections and reduce electricity demand in Malawi.

5.5 Forest on tobacco estates

Current studies show that there are many tobacco growing estates and smallholder farmers that do not have forests and trees on their farms. Tobacco growing as a business needs to have enough tree resources for constructing tobacco barns and for curing the tobacco, and for hanging the tobacco on *ndawala* and *mikangala/makako*.

- 5.5.1 Government must enforce each Estate must have at-least 10% of its total land size put under forest plantation to comply with the current Land Policy set by Government. The size of each forest plantation will depend on the scale of tobacco production specific to each estate. Such forest plantation will be a source of wood for tobacco curing to reduce the dependency of wood from outside sources. The following tree species could be considered instead of Eucalyptus: *Albezia lebbeck* (*Mtangatanga*), *Gliricidia sepium* (*Gilisidiya*), *Acacia polycantha* (*Mthethe*), *Melia azederach* (*india*), *Senna species* (*Kesha*). Such plantation must initially be planted densely (1m by 1m) to speed up growth; and after two or three years space the trees to two by two meters so that trees can start increasing in diameter growth.

- 5.5.2 Each Smallholder farmer should establish a small woodlot (20m by 20m) either sown or planted densely with *Leucaena leucocephala* (Lukina), *Sesbania sesban* (Jerejere), bamboos, *Senna siamea*, Eucalyptus (if away from water bodies and arable land), and similar species. This small woodlot shall supply twigs (*ndawala*, *makako* & *mikangala*) for hanging the tobacco.
- 5.5.3 To ensure that this enforced, the Tobacco Control Commission will have to certify each tobacco grower of availability of forests and trees on their farms before engaging into tobacco growing business.

5.6 Regulate the use of burnt red bricks

Malawi is currently the only country in this part of the world that is still using red bricks for construction. The rest of the other countries are using cement bricks and blocks. There is high demand and competition between wood for domestic use and that for brick burning.

- 5.6.1 In the short term, Government needs to put in place control mechanisms to ensure that those that produce and burn and sell red bricks have sources of firewood. Currently, most of the wood for brick burning is coming from fruit trees (mangoes) and trees from grave yards, and illegal cutting from public forest reserves.
- 5.6.2 Government also needs to make it mandatory for the construction industry to use cement bricks / blocks. This move will entail, among other issues, deliberate attempt by Government to reduce the price of cement products to ensure people can afford cement for making cement bricks / blocks.

5.7 Promotion of Individual Ownership of tree planting and management

It is a reality in Malawi that tree planting and management is more effective at individual household level than at communal level because of costs and benefits associated with tree management. As a result, trees in most communal areas in Malawi have been cut down, while trees around individual households, farms and gardens remain intact. This is more evident in both urban areas (townships) and villages across Malawi. Agro forestry has been observed to be an effective entry point for individual tree planting considering that population density is

high. Hence, there should be a strong drive to mainstream agro forestry in the farming system.

5.8 Reduce Population Increase

As a long term measure, Government needs to enforce its current policy of reducing the number of children from an average of 6 children per woman to 4 children per woman.

5.9 Promote conservation of graveyards, *Manda*

There is need to engage traditional leaders to continue promoting the conservation of trees in *Manda*.

6.0 ADVOCACY ISSUES FOR CURE AND ITS PARTNERS

CURE and its Partners may consider the following advocacy issues on its agenda:-

- Promotion of renewable energy and alternative sources of energy
- Lobby ESCOM to phase out prepaid meters and scale up prepaid meters so as to facilitate revenue collection to improve performance, increase new connections and reduce electricity demand;
- Lobby the Tobacco Control Commission to issue certificates and register farmers who can show that they have more than 10% of their total land dedicated to forests and trees.
- Lobby Government to phase out use of red bricks in the construction industry, and promote the use of cement bricks / blocks. To achieve this, Government, through Ministry of Finance, needs to remove taxes on cement products so that people can afford cement for the production of the cement bricks and blocks.
- Implementation of policy and legislation: Government must enforce and implement its policy and legislation on forestry in Malawi. Currently, these instruments are white elephants.
- The National Forestry Programme (NFP) Coordination Unit need to be put in place and activated
- There is need to track the utilization of the Forest Management Fund once it is made operational
- Data collection on forest cover should be done every ten years to keep pace with demographic calendar. The current forest cover maps should be put on calendars to sensitize the general public on the precarious situation Malawi is and take action.
- Lobby TAs to encourage establishment of VFAs

7.0 REFERENCES

Chanyenga, Tembo; Vincent Chithila and Kennedy Ndhrazi (2006) *The Impact of “The Sustainable Management of Indigenous Forests” SMIF Project Interventions on Forest Cover in Neno East*; Wildlife and Environmental Society of Malawi

Government of Malawi (1996) *Malawi’s Forestry Policy*; Ministry of Mines, Natural resources and Environment; Department of Forestry

Government of Malawi (1997) *Malawi Forestry Act*, Ministry of Mines, Natural resources and Environment; Department of Forestry

Government of Malawi (2000) *Malawi’s National Forestry Programme*; Ministry of Mines, Natural resources and Environment; Department of Forestry

Government of Malawi (2000) *The Constitution of the republic of Malawi*

Government of Malawi (2006) *Malawi Growth and Development Strategy; From Poverty to Prosperity 2006-2011*.

Government of Malawi (2005) *Standards and Guidelines for Participatory Forestry in Malawi*;

Ministry of Mines, Natural resources and Environment; Department of Forestry

Government of Malawi –BEST (2009) *Malawi Biomass Energy Strategy*

Government of Malawi, *National Action Program for Malawi for United Nations Convention to Combat Desertification*

Kainja, Sam (December 2000); *Forestry Outlook for Malawi*; In Million Bekele (2001) [Forestry Outlook Studies in Africa \(FOSA\)](#).

Mauambeta, Daulos, Samuel Kamoto, Austin Singini and Timeo Janyinji (July 2010) *Report of Biodiversity survey conducted on Limbe Leaf Tobacco Company contracted Growers’ Estates and Smallholder Clubs*; Consultancy report for Limbe Leaf Tobacco Company Limited.

Mauambeta, Daulos and Robert Kafakoma (August 2010) *CBNRM Stocktaking Report*, in press; Consultancy report for the Malawi CBNRM Forum and Development Alternatives Inco.

Yaro, Gil et al; (May 2010) *Malawi Poverty and Environment Initiative, an Economic Study*, Government of Malawi and UNEP

World Bank (2009) *Environmental Crisis or Sustainable development Opportunity; transforming the charcoal sector in Tanzania, A policy Note*

Zulu, L. (2008) Community Forest Management in Southern Malawi: Solution or Part of the problem. *Society and Natural Resources* **21**: 687-703